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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,838	02/02/2006	Daniele Pullini	463651	7477

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EXAMINER	
VALENTINE, JAMI M	
ART UNIT	**PAPER NUMBER**
2894	

MAIL DATE	DELIVERY MODE
08/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/566,838	**Applicant(s)** PULLINI ET AL.	
	Examiner JAMI M. VALENTINE	**Art Unit** 2894	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 August 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *4* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *18-23*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/JMV/

/THANH V. PHAM/
Primary Examiner, Art Unit 2894

Continuation of 11. does NOT place the application in condition for allowance because: The amended and newly proposed claims would be rejected as in the Final Office action.

The following is a response to Applicants arguments: Applicants arguments (page 7) that the finality of the previous Office action should be withdrawn are not persuasive. MPEP 706.07(a) details when a final rejection can properly be made on a second action: "Furthermore, a second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings will not be made final if it includes a rejection, on newly cited art, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p), of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art." The final rejection mailed 4/1/09 did not include a rejection on newly cited art, the same prior art was applied. The rejection under 35 USC 112 second paragraph (see Final rejection paragraph 6-13) was necessitated by Applicants amendments to the claims filed 12/29/08. In the previously examined claims it was clear that the spacer element and spacer layer were the same part because of the numerical character references. Applicants 12/29/08 amendment removed those character references causing an antecedent basis issue for the use of spacer layer and spacer element. Applicants amendment also added a step of chemically etching the semiconductor substrate which was not previously examined and necessitated the 112 rejection.

Applicants arguments (page 8) regarding whether the drawings show the spin valve as claimed are not persuasive.

Applicants arguments regarding paragraph 9 (pages 8-9) clarify the fabrication of the spacer layer using a substrate with references to the figures and specification, however these details are not clear from the claim language, and it is noted that the features upon which applicant relies (i.e., the etched substrate can be laid onto any other substrate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants arguments regarding paragraph 10 (page 9) are moot in view of the amendments to the specification.

Applicants arguments regarding paragraph 11 (page 9) are not persuasive. As claimed, the spacer layer is formed by etching and forming pores in a semiconductor substrate, then applying metallic nano particles to the substrate to form a disordered mesoscopic structure. This does not produce a dielectric. A dielectric is a non-conducting substance, i.e. an insulator. Applicants specification does support a dielectric spacer, but the claims explicitly use a semiconductor substrate and metallic nanoparticles.

Applicants arguments regarding the applied prior art, Fujiwara (pages 10-11) are not persuasive since Fujiwara's disclosure anticipates the claimed structure. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., microstructure of the composite) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims

Applicant argues that the methods mentioned by Fujiwara do not lead to the production of a material with properties similar to that of the claimed material. The examiner notes that the claims are directed to a product and contain product-by-process claims. While product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. In re Hirao, 190 USPQ 15 at 17(footnote 3). The patentability of a product does not depend on its method of production.

Applicant states (page 11) that "it is presently claimed that a semiconductor or dielectric substrate (31) is subjected to a chemical etching process…" The examiner disagrees. The claims include a semiconductor substrate but do not include a dielectric substrate.

Applicant argues (pages 11-12) that Fujiwara does not mention any pore or porous structure. This argument is not persuasive since Fujiwara figures 2 and 3A-B clearly show pores. Fujiwara also discloses that the pores can be filled with nanowires [0019] which are conducting [0022], hence anticipating the claimed structure.

Applicant argues (page 12) that it isn't possible to ascertain the electrical or magnetic properties of the device of Fujiwara. This argument is not persuasive since the structure is anticipated.

Applicant argues (page 12) that nanowires grown in the pore of a porous templates are different from nanowires grown by other methods, i.e. codeposition, and provided a reference describing the way electrodeposition in the nanopores can be controlled for tailoring the crystal structure. However the claims do not require electrodeposition. Hence this argument is not persuasive.